

REMARKS

In view of the above amendment, Applicants believe the pending application is in condition for allowance.

Claims 1 and 2 have been rejected by the Examiner under 35 U.S.C. 103 (a) as being unpatentable over Foote et al., U.S. patent 4,321,854 in view of Onuma et al. (U.S. patent 5,605,036). This rejection is respectfully traversed.

The present invention is directed to a pneumatic tire in which either the belt portion of the tire or the carcass portion of the tire is reinforced with a metallic cord obtained by shaping a bundle prepared by paralleling a plurality of metallic wires in an unstranded state with a binder of a polymeric material having a melting point of 50°C to 200°C. The metallic cord used in the pneumatic tire of the present invention achieves improved penetration of the rubber into the metallic cord for improving characteristics such as rolling resistance and durability of the tire.

The Foote et al. reference (U.S. patent 4,321,854) is directed to a composite structure which is used for a fishing line. Although the fishing line of the Foote et al. patent utilizes a core formed with strands and a jacket which can be for example polypropylene, the integrity of the fishing line is always a core surrounded by a braided jacket. This is to be compared with the present invention wherein, under curing conditions, the binder (corresponding to the patentee's jacket) is melted to release the steel wires from each other so that the rubber in the tire can readily penetrate into the clearance between the steel wires. The polymeric material which forms the binder thus diffuses into the peripheral rubber during the curing step (see page 5, lines 25-32 of the present application). In the Foote et al., the mechanism of the binder (jacket) is totally different from that the present invention, accordingly, one skilled in the art

would certainly not be lead to apply the teachings of the Foote et al. patent as it applies to a fishing line to the teachings of the Onuma et al. by substituting the fishing line for the steel cords utilized in the tire structure of the Onuma et al. patent. Furthermore, one skilled in the art certainly would not look to the fishing line technology to solve the reinforcement problems recognized in the tire technology. The Examiner has clearly reconstructed the teachings of the references in view of the Applicants' own disclosure.

Accordingly, in view of the above amendments and remarks, reconsideration of the rejection and allowance of all the claims of the present application are respectfully requested.

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Respectfully submitted,

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Attachments